Minutes of the Final Design Review for the Hard X-Ray Spectrometer (HXS)

John Seely, Finalized 8/11/00

The FDR teleconference was held on July 17, 2000, beginning at 1:00 PM EDT. Attending the teleconference were the following:

LLE	
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NIST	
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LLNL	
Perry Bell	e061547@popeye.llnl.gov

Seely reviewed the project schedule, which calls for delivery of the instrument to LLE on November 13 and OMEGA shots on November 21 as indicated by David Meyerhofer at the Tucson conference on June 21. Preliminary drafts of the following four documents are on the website http://spectroscopy.nrl.navy.mil/: Operating Procedures, Integration Plan, Static Test Plan, and Field Test Plan. These draft documents are to be updated by the NRL editors by 8/11/00 and reviewed by LLE (Action Items 2-4).

Marlin presented the mechanical drawings. The attendees agreed that the following changes should be made to the mechanical drawings:

1. Add a cover to protect the instrument's pointer interface from shot debris.
2. Remove the term "laser" from the drawing titles.
3. Thicken both the faceplate and the crossover aperture to 1 cm lead.
4. Add a VCO vent fitting to the battery pressure vessel if appropriate.
5. Turn the fiber optic cable on top of the instrument with a 45^{o} bend.

NRL agreed to attach safety instructions to the battery pressure vessel, provide spare crossover aperture step wedge filter sets, and check the bending radius of the fiber optics.

Marlin will make the changes to the mechanical drawings, will FedEx a set of the final drawings to Pien, and will provide the drawings to Seely for posting on the website (Actions #6 and 7).

Armstrong will send a 1 meter length of fiber optic cable to Holland for test and evaluation (Action #8).

Regarding the cooling loop:

1. Bell will send information on the cooling capacity to Atkin (Action #9).
2. Atkin will verify that the electronics heat load is within capacity (Action #10).
3. Pien will verify the control of the cooling loop at LLE (Action #11).

Marlin will arrange for an NRL engineer to review the mechanical design of the battery pressure vessel (Action #12).

The group discussed the need for krypton-filled targets for the OMEGA shots on November 21 as called for in the Field Test Plan. Stoeckl agreed to discuss with Tina Back the possibility of LLNL providing krypton-filled beryllium cans (Action #13). Stoeckl agreed to investigate the availability of krypton-filled CH shell targets (Action #14).

Seely summarized the Action Items. Seely will post the FDR minutes and the Action Items on the website (Action #1). All FDR action items should be resolved by August 11 (Action #15).

The FDR teleconference adjourned at 2:05 PM.